Table 1 - Two Ear, Three Frequency, Pure Tone Averages

Listener	Right Ear (db)	Left Ear (db)	Age (yr.)
MA	37	55	60
AM	43	45	72
NM	22	15	72
HG	20	18	75
FL	53	47	57
BD	20	23	70
TV	55	68	59
MT	50	57	70
JS	55	30	72
JF	32	37	62
JP	32	30	55
Mean	38	39	65.8

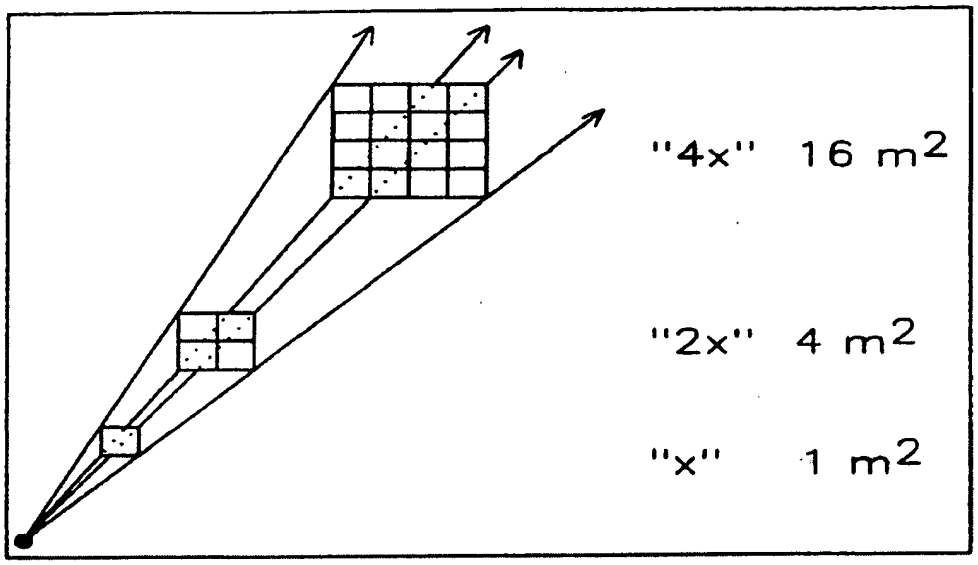

Figure 5 A three dimensional representation of the **inverse square law**. As the distance from the point source of sound increases from **X** to **2X** to **4X**, a finite amount of power is dissipated over a larger and larger area (from 1 m^2 at **X** to 4 m^2 at **2X** to 16 m^2 at **4X**). Hence, the intensity (energy/sec/m^2) decreases inversely with the square of the distance from the source.

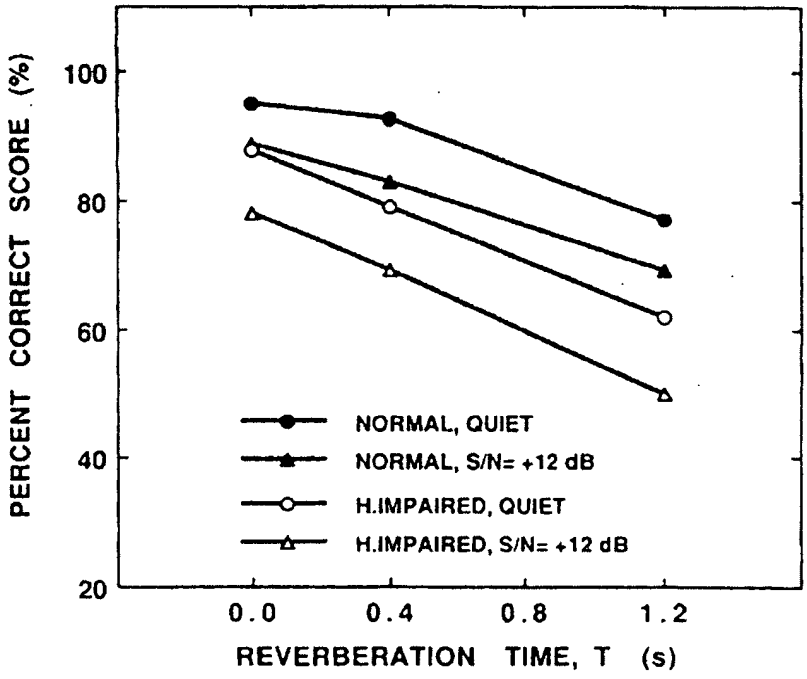

Figure 6 Percent words correct scores for normal-hearing and moderately hearing-impaired school-age children (adapted from Finitzo-Hieber T, Tillman TW. Room acoustics effects on monosyllabic word discrimination ability for normal and hearing-impaired children. J Speech Hear Res 1978;21:440–458).

FREQUENCY RANGE (Hz)	PER CENT SPEECH POWER			PER CENT INTELLIGIBILITY		
62 – 125	5	60	95	1	5	
125 – 250	13			1		
250 – 500	42			3		
500 – 1000	35			35	60	95
1000 – 2000	3	5		35		
2000 – 4000	1			13		
4000 – 8000	1			12		

Figure 3
Comparison Chart

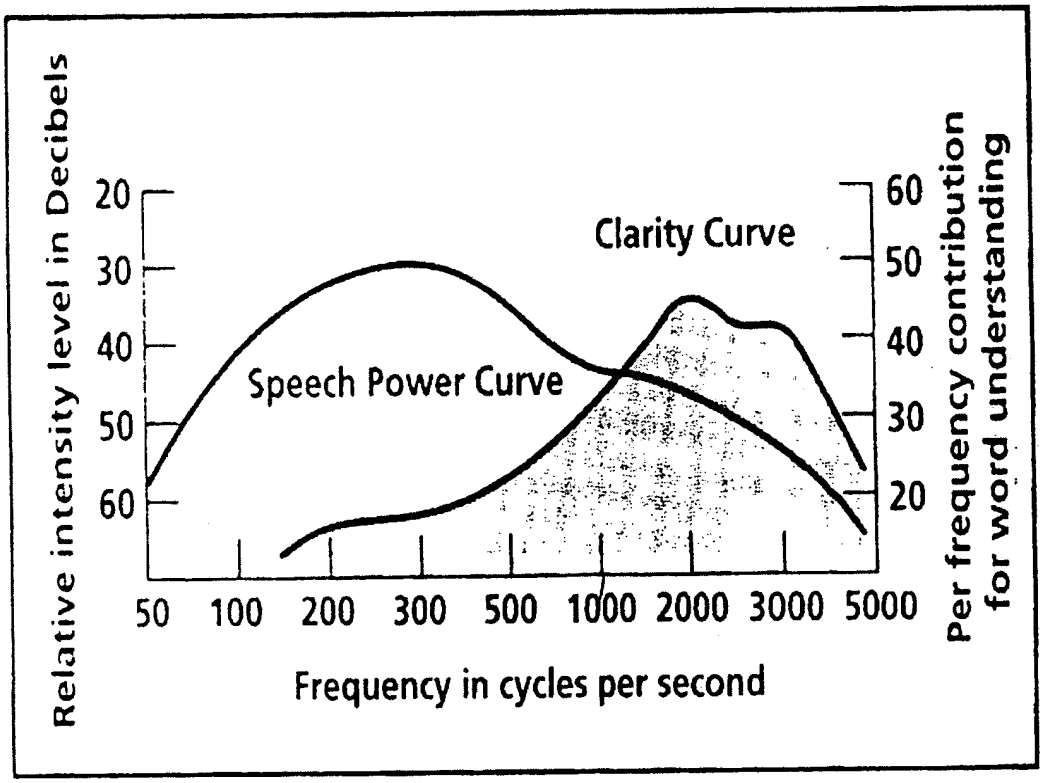

Figure 4
The Speech Power Curve
and the Speech Clarity Curve

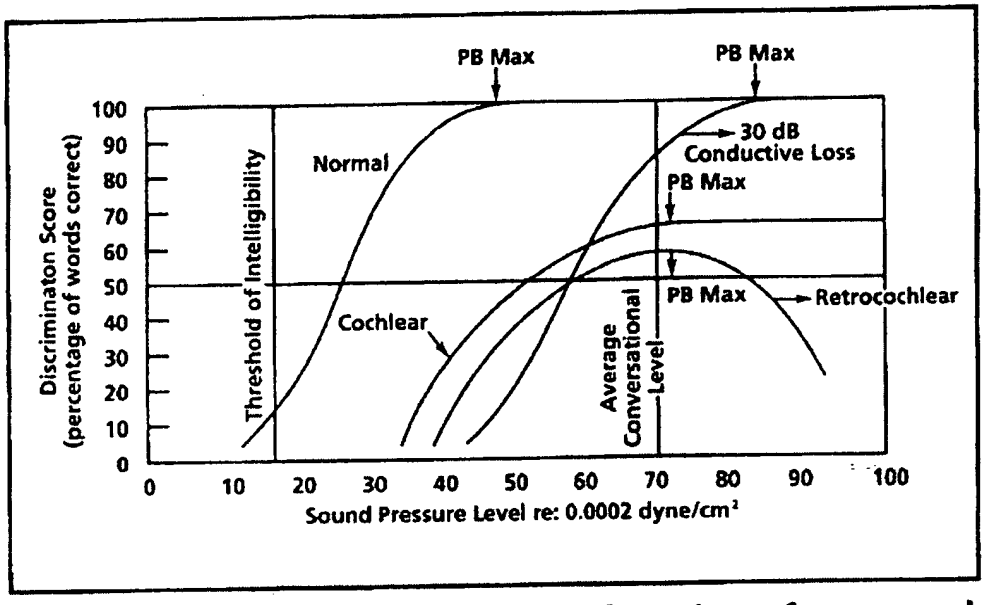

Figure 1 Performance-intensity functions for normal ear, conductive loss, cochlear site of lesion, and retrocochlear site of lesion.

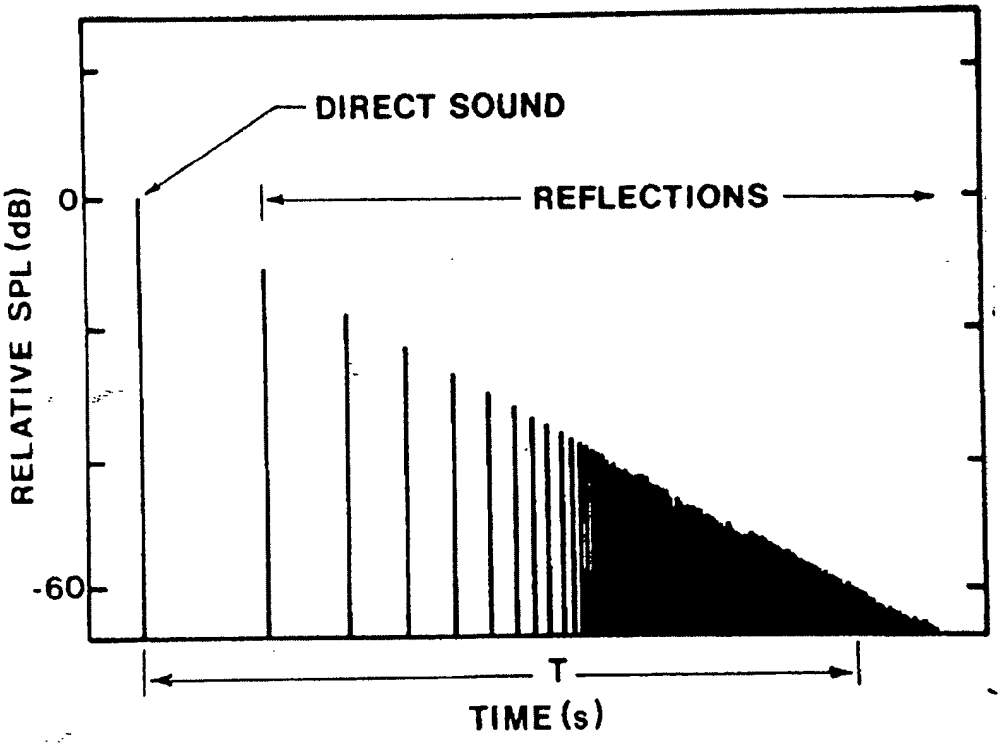

Figure 2 An example of a time sequence of reflections following a brief direct sound. Reverberation time (T) is shown for the 60-dB SPL decrease.

Table 2a - AIDED CONDITION Listening Comprehension Test Scores in %
(Without & with apparatus)

Listener	Without	With	Change
MA	84	98	+14
AM	64	84	+20
NM	80	90	+10
HG			
FL	98	98	0
BD	74	86	+12
TV	86	88	+2
MT	86	88	+2
JS	84	92	+8
JF	84	94	+10
JP			
Mean	82.2%	90.9%	+8.7%

Table 2b - UNAIDED CONDITION Listening Comprehension Test Scores in %
(Without & with apparatus)

Listener	Without	With	Change
MA	86	90	+4
AM	86	90	+4
NM	70.5	79	+8.5
HG	63	66	+3
FL	94	100	+6
BD	83	86	+3
TV	54	92	+38
MT	44	86	+42
JS	84	92	+8
JF	84	96	+12
JP	87	91	+4
Mean	76%	88%	+12%

Table 3a - AIDED CONDITION Room Sound Intensity In db SPL C-Scale
(Without & with apparatus)

Listener	Without	With	Change
MA			
AM	80	70	-10
NM	76	70	-6
HG			
FL	76	60	-10
BD			
TV	73	63	-10
MT	65	60	-5
JS	80	76	-4
JF	75	70	-5
JP			
Mean	74	67	Reduction = 7 db SPL

Table 3b - UNAIDED CONDITION Room Sound Intensity In db SPL C-Scale
(Without & with apparatus)

Listener	Without	With	Change
MA			
AM	80	70	-10
NM	72	65	-7
HG	72	65	-7
FL	86	65	-21
BD	65	60	-5
TV	76	63	-13
MT	80	74	-6
JS	86	75	-11
JF	80	70	-10
JP	78	73	-5
Mean	77.5	68	Reduction = 9.5 db SPL

Figure 6a

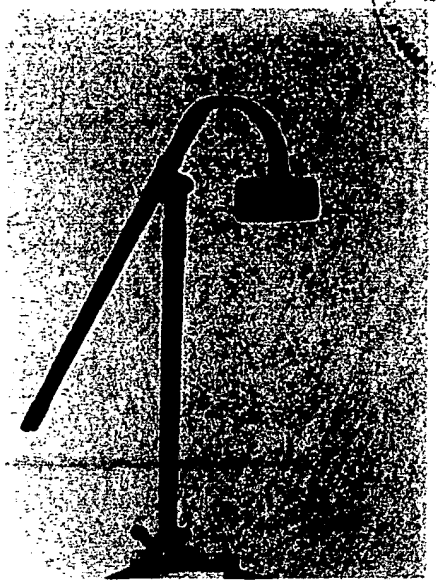

Figure 6b

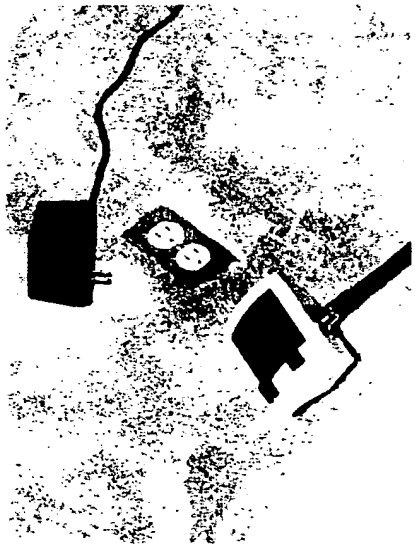

Figure 7

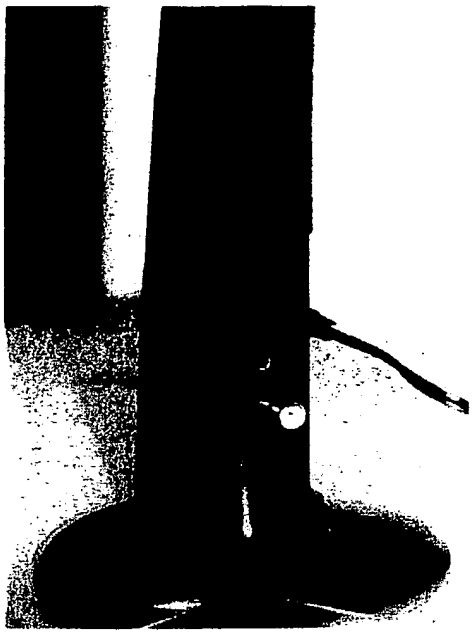

Figure 8

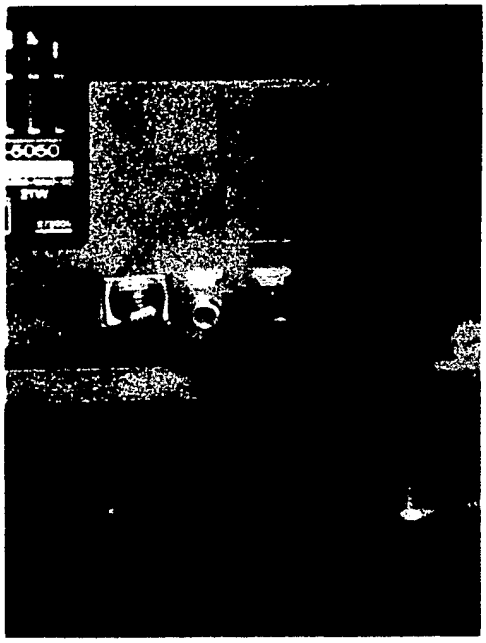

Figure 9

Figure 10